"Oh, thou the lonely heart that breakest
Stealing its treasures one by one;
I'll call thee blessed, when thou makest
The parted one."—Anonymous.

Honolulu Star-Bulletin

Death is the sum of life, the completion and meaning;
If life is not for sorrow, then death is not for sorrow.—Lincoln Colcord.

AUTOMOBILE NEWS

ONE-HALF OF TIRE BILL COULD BE SAVED, SAY LEADING AUTO EXPERTS

Tire Manufacturers State That Weight on Tire is Chief Factor —Four Questions Submitted for Technical Answers Emphasize Importance of Proper Inflation—With One Accord They Agree Pressure is Item Driver Should Give Attention

Every automobile that goes into service of any kind in the highways of the world begins to wear out tires. The yearly tire bill paid by motorists is approximately $200,000,000. In former years the more costly item of automobile upkeep was tire expense. Such improvements have been made in this giant accessory field, however, that the tire of the present day gives an added measure of service that is fully in keeping with the advances made by the motor car itself.

Figures recently compiled by an authoritative expert brought the world of motoring face to face with the assertion that one-half of the American annual tire bill could be saved. With the season of most work ahead for the average automobile, this condition prompted the Star-Bulletin to make inquiry in the proper quarters for exact data, and this has been forthcoming during the last two weeks from the technical authorities of practically all the big tire manufacturers.

Weight Chief Factor.

With one accord, the answer of the technical experts emphasizes heavily that the weight on the tire is the chief factor in determining its proper inflation pressure—that is, the motorist who wishes to economize at all must take into consideration the load his car is carrying on each long trip and inflate accordingly, rather than maintain a more or less careless watch to observe that the tires are not flat to a degree.

That this watch for proper inflation is worth while is pointed out by the fact that one trip with a capacity load of passengers—a weight that will cause a flattening of tires that would not give way in ordinary city driving with two or three passengers—may cost the car owner as much as $100 or more, for such a drive has ready possibilities of so misusing the tire equipment that it will soon go to pieces altogether thereafter.

In order to best impress among motorists the urgency at this time of proper inflation, technical views were requested on the following questions:

Four Questions Asked.

What is the proper inflation pressure for the various tire sizes?

What is the load per tire recommended and the proper pressure of tires under these loads?

Should the tires be carried at less pressure for a long drive on a hot day than is recommended for the tire on a cold day? That is, is the increase in pressure caused by increase in temperature sufficient to be taken into account in determining the inflation pressure?

Are the tire gauges that the car owner has to use in different garages sufficiently accurate to be relied upon? What precautions should the owner take to be sure he is getting the desired inflation

Glad to Respond.

Tire manufacturers have responded willingly in answering these questions, and they are almost a unit in their appreciation of the opportunity to assist in the dispensing of the tire inflation gospel.

True enough, there is a convenient rule-of-thumb method by which the inflation pressure can be determined with fair accuracy for any tire under ordinary loads. This method is one that is more widely known than observed. It is as follows:

Pump the tires to 20 pounds for each inch of cross-sectional diameter. That is, four-inch tire, 80 pounds, and so on.

While this is a good general rule, it can not be relied upon to give sufficient inflation, on the one hand, when heavy loads are carried, nor sufficient easy riding, on the other hand, when the car is overtired or the weight per tire is considerably under the normal.

Depends Upon Deflection.

The pressure to which a tire should be inflated depends upon the maximum allowable deflection of the tire under load—that is, the degree to which it flattens out at its point of contact with the ground. This deflection varies directly as the load carried and inversely as the pressure within the tire—that is, the greater the load, the greater the deflection with the same pressure, and the greater the pressure, the less the deflection with the same load.

Consequently, within limits, it is possible to make up for increased load by increasing the air pressure. This is the basis upon which most of the tire inflation tables are written. For certain specified loads a given tire must have a certain specified pressure.

Instead of determining by tests the proper tire inflation for a given load, and leaving to the owner to determine the load on the tire for himself, and then find from the table the proper pressure to prevent deflection, one company has developed an instrument, which it calls a tire caliper, by which the owner can read the deflection directly, and thus inflate the tire to a point at which it shows the allowable deflection when the caliper is applied.

This, then, takes the place of the weighing operation to determine the load on the tire, the tire table to determine the proper inflation, and the air pressure gauge to make sure that the proper inflation is obtained.

Carry Own Tire.

In the matter of tire gauges, they can be considered reliable if properly cared for. Whether or not the tire gauge used by the garage's air system is reliable in every instance is questionable. To be on the safe side, the owner should carry his own tire gauge and should keep the stem free from dirt.

The occasional checking up with other gauges is recommended. It pays to buy a rather good gauge, as some of the cheapest ones are not likely always to be uniform in their reading.

The owner inevitably has the question of sufficient air pressure to give long life to tires on the one hand and not too great pressure to give easy riding qualities.

When this is done, the motorist simply is utilizing his tire to perform the functions that the springs and shock absorbers should perform.

Not Work for Two.

Tires are not meant to do this work. Rubber and fabric can not take the place of steel. When the tire casing is allowed to run soft enough to take up the road shocks that the springs should absorb, there is a constant flexing of tread and fabric which inevitably will cause disintegration and separation between the layers, and which in time will result in the destruction of the body of the tire.

If, for the sake of easy riding, it is desired to carry the tire at somewhat less pressure than that recommended by the tire maker, this can be done, within limits, by using oversize tires which fit the same rims as the regular tires, but which are designed to give a larger capacity of air, and thus provide a greater volume of air cushion. Oversize tires are one-half inch larger in cross-section and one inch larger in over-all diameter than the regular tire.

The Haynes Automobile Company of Kokomo, Ind., will give a new Haynes "Light 12" in even exchange for the oldest Haynes motor car that can be found.

DEMAND FOR MACHINES WILL EXCEED SUPPLY, SAYS JOHN N. WILLYS

"Unless I am greatly mistaken the demand for automobiles this summer will be far in excess of the supply, notwithstanding the fact that this year's production of motor cars will be the largest in the history of the industry." This statement was made by John N. Willys, president of the Willys-Overland Company, who has just returned to Toledo from his winter home in Pasadena. "My reason for predicting a shortage of motor cars this year is based on information that I have been able to gather from Overland dealers, and from my own personal observations of conditions as they exist in the West," stated Mr. Willys. "On every hand could be seen evidences of increased prosperity, and if this prosperity is indicative of conditions throughout the country my advice to prospective motor car buyers is to shop early. I firmly believe that the rush for motor cars this summer will surpass that of the last three years combined."

TEMPERANCE AND AUTOMOBILES GO ALONG TOGETHER

Efficiency League States That Auto Lessens Use of Drink; Motor Age Agrees

The Fox River Valley Efficiency League of Illinois has made a new claim for the automobile. A few weeks ago a preacher said that the automobile was having the effect of increasing church attendance in the rural districts, extending the radius of the attendance many miles. Now the Fox River Association confers another moral, or uplifting, attribute on the automobile, asserting that the effect of the motor car is to lessen the drink habit, that its influence on the operator is toward total abstinence, and that the rapid increase in the use of automobiles is to play an important part in decreasing the consumption of alcoholic beverages.

Commenting on this assertion Motor Age says: "Whether or not our dry friends are correct in their arguments there is a certain basis of logic for the statement that drink cannot be made to fit into the age of electricity, steam, and gasoline.

Doesn't Fit In.

"With the inherent capabilities for injury to operators and others which are possessed by a powerful heavy motor car under the control of one whose vision, quickness of action, and soundness of judgment are temporarily clouded, whether it be by excess in alcoholic stimulants or from other causes, it is certain that the present somewhat stringent regulations as regards the operation of a motor car by an intoxicated driver in time will become even more straitlaced.

"Within the past few years the authorities have become anything but liberal in their views of accidents caused by drivers about whom there has been any suspicions of having been under the influence of liquor. In many cities the weight of the law is considerably more forcible upon the intoxicated driver involved in an accident than it is upon a sober one under exactly similar conditions.

"It is no more than logical to assume that these considerations would have a direct effect upon motorists themselves in preventing overindulgence when they expect to be operating their machines. Most motorists, realizing that they are in danger of severe penalties in case of an accident if they show signs of intoxication, even though they may not admit that they are susceptible to its effects, are less prone to look upon the wine when it is red."

FANCY DESIGN DOESN'T COUNT WITH AUTOISTS

"James G. Heaslet, vice-president in charge of engineering and production of the Studebaker Corporation, belongs to the limited few who have been in the automobile industry practically since its inception," says C. C. Clark of L. C. Ables Company, local distributers of Studebaker cars.

"It is not generally known outside of the automobile industry, and particularly among the old-timers, that he first designed an automobile some 19 years ago—when the automobile industry was "in its swaddling clothes." But now that he has developed the Studebaker product up to the point where this year 100,000 Studebaker cars must be built to met the demand, it is a difficult matter for him to hide his "light under a bushel" any longer.

Policy Undeviating.

"It is a far cry from the first horseless carriage which Heaslet designed to the present highly developed series 17 Studebaker four-cylinder and six-cylinder models. Yet through all the years he has never deviated from his policy of adhering to a dignified design of the product for which he was responsible.

"It is doubtful if any business has held out greater temptations to engineers to change from a well-defined ideal to a whim of the moment than has the automobile industry. It has been an industry of Aladdin-like changes and meteoric growth, an industry where things happened so fast as to make men engaged in it lose sight of the biggest ideals, or at least sink those ideals behind some trend of the moment.

Real Worth Sought.

"It is my experience that people have changed in their ideas of what counts for most in an automobile. They are no longer swayed by unique or novel design, but by real worth. They want the car that offers the most all-around value for the amount of money they are willing to spend, and they use common-sense methods of determining that value. They look for power, dignified design, roomy comfort, easy-riding quality, good looks that do not become obsolete in a year, and the ability of the car to stand up under hard usage. The great majority of buyers will choose a car that is a well-balanced unit rather than a car of faddish design or one that is over developed in one or two points and under-developed in others."

SAN DIEGO RUN OF CHEVROLET IS ANALYZED

The record made last week by R. C. Durant in a "Baby Grand" model Chevrolet for the round trip between Los Angeles and San Diego of 7 hours and 55 minutes was not for the purpose of showing any terrific amount of speed, but was staged so that those interested in the light car of that price might be assured that the stock placed in these machines will and does stand the test of long, hard and continuous road driving at a good deal more than average speed. His average was 35 7-19 miles per hour.

An official of the company in discussing the run said:

"What Durant did with the little stock baby grand can be done with any baby grand model. Cars of the wheel base like that of the Chevrolet are not built to hold the road at any greater speed than 60 miles per hour. It would be folly to attempt any more than this as it would be too dangerous, but it is now a definitely proved fact that a little car of this type, when constructed along standard lines and of standard material, can do 50 and 60 miles per hour and keep it up.

"A great many think that a trip to San Diego is altogether over smoothly paved roads, but such is not the case. Owing to the floods which visited the southern portion of the country last winter, rough detours and wash-outs have to be covered in order to make the trip between the two cities. Also there are several very severe grades on this road. Thus any automobile sent over at its maximum efficiency receives a full test both for speed and power.

"Durant could have made much faster time had he wished to overtax the little motor, but his idea was to make a record with the stock car, using the same at its points of greatest efficiency during the time necessary to complete the trip."

SIMPLE.

Complaint about the price of gasoline
And let your angry voice ring loud and far.
And even though you haven't got a bean,
Some fool will think you own a motor car.

PACKARD MOTOR FOR AIRCRAFT PROVES TO BE SUCCESSFUL

Preliminary Tests at Sheepshead Bay Carry Out Ideas of Manufacturers—Tests for Big Motors Will Take Place Early in July—Speed of 118 Miles an Hour is Reached in Straightaway—De Palma Pleased With Showing Made

Work of removing trees, filling in low places and generally grading and smoothing off the Packard aviation field, which borders on Lake St. Clair, near Mount Clemens, Mich., is well under way. Practical tests of the first big aircraft motor manufactured by the Packard Motor Car Company will take place early in July. These tests will be made with a Sloane aeroplane of the tractor type. The big motor will develop 300 horsepower.

At Sheephead Bay recently, J. G. Vincent, vice-president of engineering and inventor of the twin-six motor, and Ralph De Palma, racing man, made tests of a smaller motor which the Packard Company has developed for use in the scout type of plane, in a specially designed speedster that Mr. Vincent calls the "aeroplane car." The track trials verified all of the previous findings made in laboratory tests at the factory experimental shops.

Severe Test.

The purpose of the speedway tryout was to make sure of the principles of twin-six design for aircraft motors. The motor was run continuously for long periods on the speedway at 3400 revolutions per minute. The necessary horsepower and engine speed for aeroplane usage are developed at 2100 revolutions per minute. Hence the track work is a much more severe test of the engine than actual flying.

The aeroplane car made 102 miles in 59.56 minutes. Several laps were taken at from 100 to 110 miles per hour. On the straightaway a speed of 118 miles per hour was reached. The car will not be entered in any racing competitions, as it was not designed for a racing car. Its only purpose is to make tests of aircraft motors. But Mr. Vincent says it is probable that some public demonstrations will be arranged. Such exhibitions of speed work will be carried on under A. A. A. supervision.

Slight Difference.

The aircraft motor tried out on the Sheepshead speedway is different from the twin-six motor used in the Packard motor cars in a few particulars, although the basic principles are the same. The cylinders are cast in blocks of three and have two overhead valves to each cyclinder. There are, of course, overhead camshafts, one to each set of six cylinders. This construction permitted a development of 135 horsepower from the scout plane motor.